UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/504,893	02/16/2000	Seong-jin Moon	1293.1094/MDS	5544

49455 7590 02/23/2006

STEIN, MCEWEN & BUI, LLP
1400 EYE STREET, NW
SUITE 300
WASHINGTON, DC 20005

EXAMINER	
LAO, LUN S	

ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/504,893	MOON ET AL.	
	Examiner	Art Unit	
	Lun-See Lao	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11-14-2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Introduction

1. This action is response the amendment filed on 11-14-2005. Claims 1, 3-4 and 9 have been amended. Claims 1-12 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11-14-2005 has been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hirayama et al. (US PAT. 5,652,824).

Consider claim 1 Hirayama teaches that a method of selecting audio channels of an A/V data stream comprising a plurality of programs (such as, plurality of data units),

each program (such as a movie) comprising at least two kinds of audio data streams (eg. Japanese and English), each audio data stream comprising at least two sub-audio data streams which are not repeated and have a series of channel IDs according to a predetermined order of precedence, the method comprising (see col.2 line 11-20):

(a) when one of the programs (see fig.7, (S5)) is changed to another one of the programs, searching whether there is a sub-audio data stream having a channel ID which is the same as a user selected channel ID assigned to the sub-audio data stream of the program which was being reproduced before (such as (S10)) the program was changed, in the another program (see col. 11 line 12-67); and when it is determined (S8) that there is the sub-audio data stream having a channel ID which is the same as a user selected channel ID assigned to the sub-audio data stream of the program which was being reproduced before (S10) the program was changed in the step (a), selecting the sub-audio data stream having the same channel ID of the another program (see fig.7 line 12-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, and 4-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama et al. (US PAT. 5,652,824) in view of Endoh et al. (US PAT. 6,016,295).

Consider claim 2, Hirayama does not clearly teach when there is no sub-audio data stream having a channel ID which is the same as the channel ID assigned to the sub-audio data stream of the program which was being reproduced before being changed, the method in the another program further comprising selecting a sub-audio data stream having a channel selection number which has first precedence in the predetermined order of precedence among the sub-audio data streams of the another program.

However, Endoh teaches when there is no sub-audio data stream having a channel ID which is the same as the channel ID assigned to the sub-audio data stream of the program which was being reproduced before being changed, the method in the another program further comprising selecting a sub-audio data stream having a channel selection number which has first precedence in the predetermined order of precedence among the sub-audio data streams of the another program (the previous audio channel ID can be interpret as the default language code and next program will continue to use the default code if it is the same, otherwise it will change, and see figs. 57,59 and col.32 line 42-col.33 line 52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine the teaching of Endoh into Hirayama to provide special applications including karaoke which comply with the various demands of the users, it is necessary to combine a conventional surround sound system with a special system (i.e., a karaoke system) and it is necessary to consider the compatibility between them.

Consider claim 4 Hirayama teaches a method of selecting audio channels of an A/V data stream comprising a plurality of programs (different movies), each program (movie) comprising at least two audio data streams (different languages), and ones of the audio data streams having dual mono channels, the method comprising (see col. 2 line 11-20):

reproducing one of the dual mono channels of one of the audio data streams of a first one of the programs according to a user selection (see col. 6 line 26-59);

changing to a second one of the programs (see fig. 7 and col. 11 line 12-67); but Hirayama does not clearly teach that determining if one of the dual mono channels of one of the audio data streams of the second program corresponds to the one dual mono channel of the one audio data stream of the first program, and reproducing the one dual mono channel of the one audio stream of the second program if the correspondence exists.

However, Endoh teaches that determining if one of the dual mono channels of one of the audio data streams of the second program corresponds to the one dual mono channel of the one audio data stream of the first program, and reproducing the one dual mono channel of the one audio stream of the second program if the correspondence exists (the previous dual mono channel can be interpret as the surround sound mode and next program will continue to use the surround sound mode if it is the same, otherwise it will be changed bit stream information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine the teaching of Endoh into Hirayama to provide an audio system that easily maintains compatibility with a surround sound system when in a special system that transmits surround audio using a plurality of transmission channels which are used for special uses such as karaoke and surround sound.

Consider claims 5-7 Endoh teaches the method of further comprising:

reproducing one of the audio streams of the second program corresponding to the one audio stream of the first program having the one dual mono channel if the correspondence in the determining step does not exist (the previous dual mono channel can be interpret as the surround sound mode and next program will continue to use the surround sound mode if it is the same, otherwise it will be changed bit stream information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59); and reproducing one channel of one of the audio streams of the second program having a closest order (such as x<n and see fig.62 and col.33 line 60-col.34 line45) of status to the one audio stream of the first program having the one dual mono channel if the correspondence in the determining step does not exist(the previous dual mono channel can be interpret as the surround sound mode and next program will continue to use the surround sound mode if it is the same, otherwise it will be changed bit stream information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59) and reproducing a default channel of one of the audio streams of the second program if the correspondence in the determining step does not exist (the previous dual mono channel can be interpret as the surround sound mode and next program will continue to

use the surround sound mode if it is the same, otherwise it will be changed bit stream information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59).

Consider claim 8 Endoh teaches the method of further comprising:

reproducing one channel of one of the audio streams of the second program having a higher order (such as x<n and see fig.62 and col.33 line 60-col.34 line45) of precedence than the one audio stream of the first program having the one dual mono channel if the correspondence in the determining step does not exist (the previous dual mono channel can be interpret as the surround sound mode and next program will continue to use the surround sound mode if it is the same, otherwise it will be changed bit stream information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59).

Consider claim 9 Hirayama teaches a method of selecting audio channels of an A/V data stream comprising a plurality of programs (eg. different movies), each program (a movie) comprising at least two audio data streams (different languages, such as Japanese and English) with at least one channel, ones of the audio data streams having dual mono channels, wherein each channel has a channel ID (such as, #0 to #7) according to a predetermined order of precedence within the program, the method comprising (see col. 2 line 11-20); and when a first one of the programs is changed (see fig. 7, (S5)) to a second one of the programs, searching (S8) whether there is a second dual mono channel of the second program having a channel ID (such as, #0 to #7)) which is the same as a channel ID assigned to a first dual mono channel selected by a user of the first program which was being reproduced prior to the change (see fig.7 and

col. 11 line 12-67); but Hirayama teaches that selecting the second dual mono channel if the search is successful.

However, Endoh teaches when a first one of the programs is changed to a second one of the programs, searching whether there is a second dual mono channel of the second program having a channel ID which is the same as a channel ID assigned to a first dual mono channel of the first program which was being reproduced prior to the change; and selecting the second dual mono channel if the search is successful (the previous dual mono channel can be interpret as the surround sound mode and next program will continue to use the surround sound mode if it is the same, otherwise it will be changed bit stream information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine the teaching of Endoh into Hirayama to provide an audio system that easily maintains compatibility with a surround sound system when in a special system that transmits surround audio using a plurality of transmission channels which are used for special uses such as karaoke and surround sound.

Consider claims 10-12 Endoh teaches the method of further comprising: selecting one channel of the second program having a channel selection number with a higher order(such as x<n and see fig.62 and col.33 line 60-col.34 line45) of precedence than the first dual mono channel if the search is unsuccessful (the previous dual mono channel can be interpret as the surround sound mode and next program will continue to use the surround sound mode if it is the same, otherwise it will be changed bit stream

information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59), and selecting one channel of the second program having a channel selection number closest(such as x<n and see fig.62 and col.33 line 60-col.34 line45) in correspondence to the first dual mono channel if the search is unsuccessful (the previous dual mono channel can be interpret as the surround sound mode and next program will continue to use the surround sound mode if it is the same, otherwise it will be changed bit stream information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59); and selecting a default one of the channels of the second program if the search is unsuccessful (the previous dual mono channel can be interpret as the surround sound mode and next program will continue to use the surround sound mode if it is the same, otherwise it will be changed bit stream information BSI and see figs. 56,62, and col.35 line 25-col.36 line 59 and see the discussion above claim 9)).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama et al. (US PAT. 5,652,824) in view of Park (US PAT. 5,701,384).

Consider claim 3, Hirayama does not clearly teach when there is no sub-audio data stream having a channel ID which is the same as the channel ID assigned to the sub-audio data stream of the program which was being reproduced before being changed, the method further comprising : searching among the sub-audio data streams of the another program for whether there is a sub-audio data stream having a different channel ID which is the channel ID assigned to the sub-audio data stream of the program which was reproduced before the program was changed decreased by 1, and

when the sub-audio data stream having the different channel ID exists in the another program, selecting, from the sub-audio data streams of the another program, the sub-audio data stream having the different channel ID which is the channel ID assigned to the sub-audio data stream of the program which was reproduced before the program was changed decreased by 1.

However, Park teaches that when there is no sub-audio data stream having a channel ID (such as V-CD and se fig.4, S2) which is the same as the channel ID assigned to the sub-audio data stream of the program which was being reproduced before being changed, the method further comprising : searching among the sub-audio data streams of the another program for whether there is a sub-audio data stream having a different channel ID (V-CD?) which is the channel ID assigned to the sub-audio data stream of the program which was reproduced before the program was changed decreased by 1 (S7), and when the sub-audio data stream having the different channel ID exists in the another program, selecting, from the sub-audio data streams of the another program, the sub-audio data stream having the different channel ID which is the channel ID assigned to the sub-audio data stream of the program which was reproduced before the program was changed decreased by 1 (see fig.4, (S7) and col. 6 line 66-col. 7 line 65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine the teaching of Park into Hirayama to provide

a method capable of automatically searching different tracks selectively allotted in a V-CD according to whether or not a CD-ROM XA synchronization signal is detected for the V-CD for a V-CD recording/reproducing system.

Response to Arguments

8. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any response to this action should be mailed to:

Mail Stop ____(explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:
(571) 273-8300

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (571) 272-7501 The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chin Vivian, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao,Lun-See L.S.
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
date 02-13-2006

HUYEN LE
PRIMARY EXAMINER